Usual FLASH : conducting floating gate

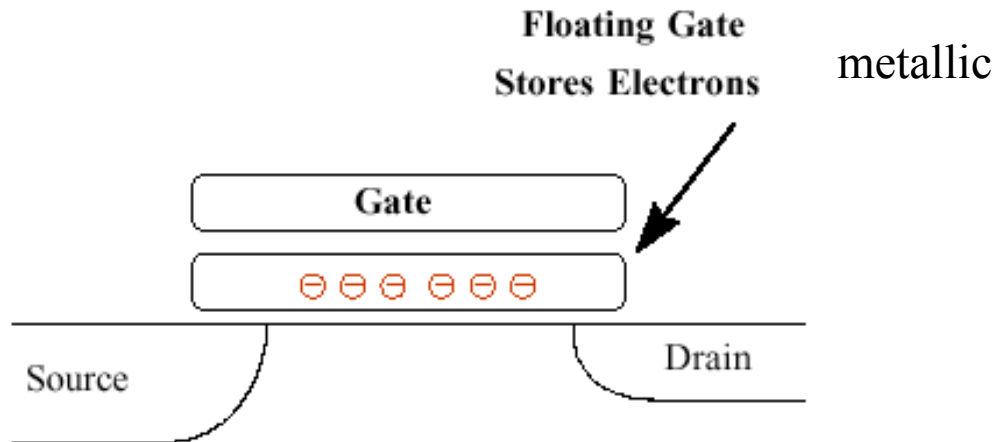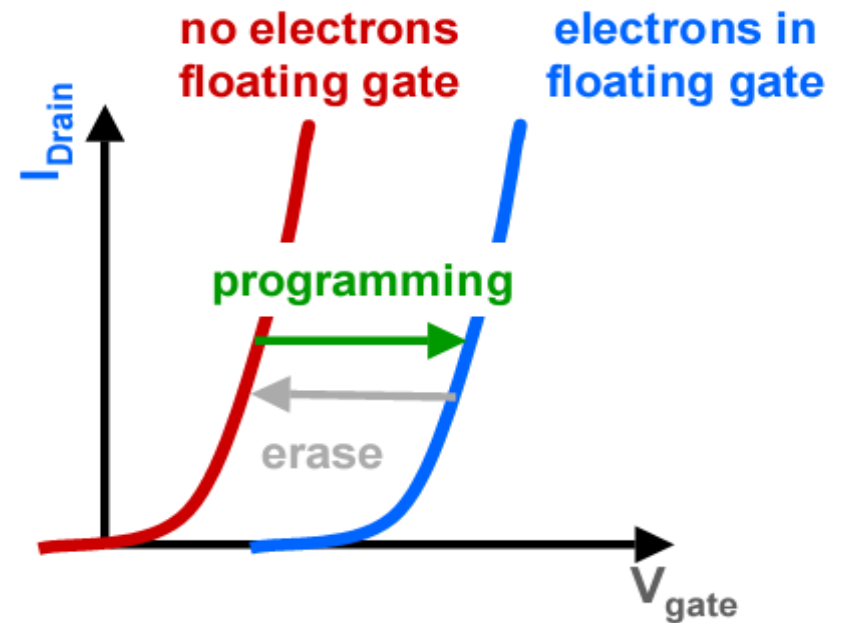metallic

Floating Gate Stores Electrons

Gate

Source

Drain

Figure 2: Single transistor flash memory cell

I_{Drain}

no electrons floating gate

electrons in floating gate

programming

erase

V_{gate}

Spansion's technology : charging an insulating layer :
2 separated charges can be written

SPANSION™

MirrorBit Quad 4 Bits / Cell

Voltage Level

4 threshold voltages

Two storage regions